

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Luminant Generation Company LLC

AUTHORIZING THE OPERATION OF
Forney Power Plant
Fossil Fuel Electric Power Generation

LOCATED AT
Kaufman County, Texas
Latitude 32° 45' 13" Longitude 96° 29' 27"
Regulated Entity Number: RN100213420

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No: O2402 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five-year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit, except for reports required solely by the Acid Rain permit or Cross-State Air Pollution Rule Trading Program requirements, must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
 - F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.302 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
 - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
 - G. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

- F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
 - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

- B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- E. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
 - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)
 - (iv) Title 30 TAC § 111.211 (relating to Exception for Prescribed Burn)
 - (v) Title 30 TAC § 111.213 (relating to Exception for Hydrocarbon Burning)
 - (vi) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (vii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)

- G. Title 40 CFR § 60.15 (relating to Reconstruction)
- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

- 8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time

period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

12. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
13. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For electric utilities in the Dallas-Fort Worth Eight-Hour Nonattainment area, 30 TAC § 117.9130
14. Use of Emission Credits to comply with applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) Offsets for Title 30 TAC Chapter 116
 - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
 - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

- (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

15. Use of Discrete Emission Credits to comply with the applicable requirements:

- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Temporary Fuel Shortages (30 TAC § 112.15)

16. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:

- A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
- B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)
- C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)
- D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

Permit Location

17. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

18. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

19. For units U1, U2, U3, U4, U5, and U6 (identified in the Certificate of Representation as units U1, U2, U3, U4, U5, and U6), located at the affected source identified by ORIS/Facility code 55480, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained in 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine

compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the ARP.

- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO₂ in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO_x Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.

E. Excess emissions requirements for SO₂ and NO_x.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
 - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).

- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
 - (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
 - (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
 - (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
 - (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
 - (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
 - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements

20. For units U1, U2, U3, U4, U5, and U6 (identified in the Certificate of Representation as units U1, U2, U3, U4, U5, and U6), located at the site identified by Plant code/ORIS/Facility code 55480, the designated representative and the owner or operator, as applicable, shall comply with the following CSAPR requirements.

A. General Requirements

- (i) The owners and operators of the CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall operate the source and the unit in compliance with the requirements of the CSAPR NO_x Ozone Season Group 2 Trading Program and all other applicable State and federal requirements.
- (ii) The owners and operators of the CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the requirements of 40 CFR Part 97, Subpart EEEEE for CSAPR NO_x Ozone Season Group 2 Trading Program, and with the General Terms and Conditions of the Federal Operating Permit (FOP) that incorporates the CSAPR requirements.

B. Description of CSAPR Monitoring Provisions

- (i) The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following paragraph(s). These unit(s) are subject to the requirements for the CSAPR NO_x Ozone Season Group 2 Trading Program.
 - (1) For unit(s) U1, U2, U3, U4, U5 and U6, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for NO_x, and with the excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D for heat input.
- (ii) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§ 97.830 through 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading program.
- (iii) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§ 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources>.
- (iv) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR § 75.66 and § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative

monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.

- (v) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR § 75.66 and § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
- (vi) The descriptions of monitoring applicable to the unit(s) included above meet the requirement of 40 CFR §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and therefore procedures for minor permit revisions, in accordance with 30 TAC § 122.217, may be used to add or change this unit's monitoring system description.

21. CSAPR NO_x Ozone Season Group 2 Trading Program Requirements (40 CFR § 97.806)

A. Designated representative requirements

- (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.813 through 97.818.

B. Emissions monitoring, reporting, and recordkeeping requirements

- (i) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.831 (initial monitoring system certification and recertification procedures), § 97.832 (monitoring system out-of-control periods), § 97.833 (notifications concerning monitoring), § 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (ii) The emissions data determined in accordance with 40 CFR § 97.830 through § 97.835 and any other credible evidence shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR §§ 97.811 (a)(2) and (b) and § 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

C. NO_x emissions requirements

(i) CSAPR NO_x Ozone Season Group 2 emissions limitation

- (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.824 (a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.
- (2) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:
 - (a) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR § 97.824 (d); and
 - (b) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(ii) CSAPR NO_x Ozone Season Group 2 assurance provisions

- (1) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.825 (a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.825 (b), of multiplying -
 - (a) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and

- (b) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- (2) The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Ozone Season Group 2 trading budget under 40 CFR § 97.810 (a) and the state's variability limit under 40 CFR § 97.810 (b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (5) To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,
 - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (b) Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (iii) Compliance periods
 - (1) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.
 - (2) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.

- (iv) Vintage of allowances held for compliance
 - (1) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - (2) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (v) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- (vi) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (1) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (vii) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

D. FOP revision requirements

- (i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (1) The certificate of representation under 40 CFR § 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.816 changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.
- (ii) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 40 CFR § 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

- (i) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (ii) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

- (i) No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR § 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary	21
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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
ADMINGEN	SRIC ENGINES	N/A	60III-1	40 CFR Part 60, Subpart IIII	No changing attributes.
ADMINGEN	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
CONDTANK	STORAGE TANKS/VESSELS	N/A	115B-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
EMGEN2	SRIC ENGINES	N/A	60III-1	40 CFR Part 60, Subpart IIII	No changing attributes.
EMGEN2	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-HRSG*	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	U1, U2, U3, U4, U5, U6	60Da-1	40 CFR Part 60, Subpart Da	No changing attributes.
GRP-STACK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	U1, U2, U3, U4, U5, U6	111A-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-TANKS1	STORAGE TANKS/VESSELS	DIES-TANK1, TK-GT11LO, TK-GT12LO, TK-GT13LO, TK-GT21LO, TK-GT22LO, TK-GT23LO, TK-ST10LO, TK-ST20LO	115B-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-TURBINES	STATIONARY TURBINES	U1, U2, U3, U4, U5, U6	117C-1	30 TAC Chapter 117, Utility Electric Generation	No changing attributes.
GRP-TURBINES	STATIONARY TURBINES	U1, U2, U3, U4, U5, U6	60GG-1	40 CFR Part 60, Subpart GG	No changing attributes.
LUBE1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5127	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
WTRPMP	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ADMINGEN	EU	60III-1	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 1039 Appendix I	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 37 KW and less than 130 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I.	§ 60.4209(a)	§ 60.4214(b)	None
ADMINGEN	EU	60III-1	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 1039 Appendix I	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I.	§ 60.4209(a)	§ 60.4214(b)	None
ADMINGEN	EU	60III-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than 130 KW and a	§ 60.4209(a)	§ 60.4214(b)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4218 § 1039 Appendix I	displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.30 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I.			
ADMINGEN	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
CONDTANK	EU	115B-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
EMGEN2	EU	60IIII-1	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less	§ 60.4209(a)	§ 60.4214(b)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.4211(f) § 60.4218 § 1039 Appendix I	than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I.			
EMGEN2	EU	60III-1	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 1039 Appendix I	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO _x emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I.	§ 60.4209(a)	§ 60.4214(b)	None
EMGEN2	EU	60III-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 1039 Appendix I	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40	§ 60.4209(a)	§ 60.4214(b)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						CFR 1039-Appendix I.			
EMGEN2	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRP-HRSG*	EU	60Da-1	§111 Pollutant	40 CFR Part 60, Subpart Da	§ 60.40Da(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Da ** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Da	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Da
GRP-STACK	EP	111A-1	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-TANKS1	EU	115B-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP-TURBINES	EU	117C-1	CO	30 TAC Chapter 117, Utility Electric Generation	§ 117.1300 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 117, Utility Electric Generation ** § 117.1310(b) is a state-only requirement	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 117, Utility Electric Generation	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 117, Utility Electric Generation	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 117, Utility Electric Generation	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 117, Utility Electric Generation
GRP-TURBINES	EU	117C-1	NO _x	30 TAC Chapter 117, Utility Electric Generation	§ 117.1300 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 117, Utility Electric Generation	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 117, Utility Electric Generation	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 117, Utility Electric Generation	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 117, Utility Electric Generation	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 117, Utility Electric Generation
GRP-TURBINES	EU	60GG-1	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of	[G]§ 60.335(a) § 60.335(b)(2) § 60.335(b)(3) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the amount as determined from the specified equation.			
GRP-TURBINES	EU	60GG-1	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
LUBE1	EP	R5127	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
WTRPMP	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(i) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)

Additional Monitoring Requirements

Periodic Monitoring Summary	29
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Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-HRSG*	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Da	SOP Index No.: 60Da-1
Pollutant: §111 Pollutant	Main Standard: § 60.40Da(a)
Monitoring Information	
Indicator: NOx concentration	
Minimum Frequency: Four times per hour	
Averaging Period: 30-duct burner operating day rolling average	
Deviation Limit: Maximum emission of 1.6 lb NOx/MWh calculated as specified in the periodic monitoring text	
<p>Periodic Monitoring Text: The continuous emissions monitoring system (CEMS) specified in NSR Permit No. 41953/PSD Permit No. PSDTX951 shall be used to monitor compliance with the NOx emission limit. NOx emissions shall be corrected/calculated in units of the underlying applicable emission limitation (lb/MWh).</p> <p>The emission rate (in lb/MWh) for each duct burner shall be calculated as described below for each rolling period that includes 30 duct burner operating days. A duct burner operating day is defined as a day during which the duct burner was fired, excluding clock-hours during which the associated combustion turbine is operated in maintenance, start-up, or shutdown (MSS) mode (as defined in NSR Permit No. 41953/PSD Permit No. PSDTX951). Specifically, the emission rate is calculated as the sum of the NOx CEMS emission measurements (in lbs) for the clock-hours specified above, divided by the sum of the gross electrical output (in MWh) of the associated HRSG and combustion turbine combined for the same clock-hours.</p> <p>The gross electrical output apportioned to the HRSG shall be calculated as: 1) the gross electrical output of the associated steam turbine, multiplied by 2) the total heat input to the combined cycle unit to which the HRSG belongs (i.e. the heat input to the duct burner plus the heat input to its associated combustion turbine), then divided by 3) the sum of the total heat input to each combined cycle unit associated with the steam turbine.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-HRSG*	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Da	SOP Index No.: 60Da-1
Pollutant: §111 Pollutant	Main Standard: § 60.40Da(a)
Monitoring Information	
Indicator: Natural Gas Sulfur Content	
Minimum Frequency: Monitoring schedule listed in 40 CFR §60.334(h)(3)	
Averaging Period: N/A	
Deviation Limit: 20 grains sulfur per 100 scf natural gas	
<p>Periodic Monitoring Text: Maximum sulfur content of 20 grains per 100 dry standard cubic feet (dscf) is defined at §60.331(u) for natural gas. This maximum sulfur content will ensure that 0.2 lb/MMBtu SO₂ limit stated in NSPS Da will not be exceeded.</p> <p>Maximum SO₂ emissions = (20gr S/100 SCF) x (10⁶ SCF)/1,040 MMBtu x (lb/7,000 gr) x 2 SO₂/S = 0.05 lb SO₂/MMBtu</p> <p>Fuel is demonstrated to meet the sulfur content limit of 20 gr/100 scf per §60.334(h)(3). Any demonstration that shows fuel content in excess of 20 gr/100 scf shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-STACK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: N/A	
Deviation Limit: It is a deviation if an alternate fuel is fired and visible emissions are present; if Test Method 9 is performed to determine opacity, the opacity shall not exceed 15%.	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-TURBINES	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-1
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: NO _x concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Four operating hours, rolling average	
Deviation Limit: A 4-operating-hour rolling average value of NO _x concentration greater than 109 ppmv at 15% O ₂ .	
Periodic Monitoring Text: The continuous emissions monitoring system (CEMS) specified in Permit Nos. 41953 & PSDTX951 shall be used to monitor compliance with the NO _x emission limit.	

Permit Shield

Permit Shield 34

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
COND-TANK	N/A	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 cubic meters.
GRP-TANKS1	DIES-TANK1, TK-GT11LO, TK-GT12LO, TK-GT13LO, TK-GT21LO, TK-GT22LO, TK-GT23LO, TK-ST10LO, TK-ST20LO	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 cubic meters.
GRP-TANKS2	DIES-TANK2, DIES-TANK3, DIES-TANK4, TK-11A BFPO, TK-11B BFPO, TK-12A BFPO, TK-12B BFPO, TK-13A BFPO, TK-13B BFPO, TK-21A BFPO, TK-21B BFPO, TK-22A BFPO, TK-22B BFPO, TK-23A BFPO, TK-23B BFPO, TK-ST10HO, TK-ST20HO	30 TAC Chapter 115, Storage of VOCs	Storage vessel capacity is less than 1000 gallons.
GRP-TANKS2	DIES-TANK2, DIES-TANK3, DIES-TANK4, TK-11A BFPO, TK-11B BFPO, TK-12A BFPO, TK-12B BFPO, TK-13A BFPO, TK-13B BFPO, TK-21A BFPO, TK-21B BFPO, TK-22A BFPO, TK-22B BFPO, TK-23A BFPO, TK-23B BFPO, TK-ST10HO, TK-ST20HO	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 cubic meters.
GRP-TANKS3	TK-CTH2SO4, TK-CTNAHSO4, TK-CTNAOCL, TK-CTSI, TK-RWH2SO4, TK-RWNAOCL	30 TAC Chapter 115, Storage of VOCs	Storage vessel capacity is less than 1000 gallons.
GRP-TANKS3	TK-CTH2SO4, TK-CTNAHSO4, TK-CTNAOCL, TK-CTSI, TK-RWH2SO4, TK-RWNAOCL	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 cubic meters.
GRP-TOWERS	CT-1, CT-2	40 CFR Part 63, Subpart Q	Cooling towers have not operated with chromium-based water treatment chemicals after 09/08/1994.
GRP-TURBINES	U1, U2, U3, U4, U5, U6	40 CFR Part 60, Subpart KKKK	Stationary combustion turbines commenced construction prior to and were not

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			modified/reconstructed after 02/18/2005.
TK-USED OIL	N/A	30 TAC Chapter 115, Storage of VOCs	Storage vessel capacity is less than 1000 gallons.
TK-USED OIL	N/A	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 cubic meters.
WTRPMP	N/A	40 CFR Part 60, Subpart IIII	Stationary CI ICE was manufactured prior to and was not modified/reconstructed after 07/11/2005.

New Source Review Authorization References

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New Source Review Authorization References by Emission Unit	38

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX951	Issuance Date: 07/24/2020
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 41953	Issuance Date: 07/24/2020
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.374	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
ADMINGEN	JOHN DEERE 4045HF285 CI ICE - 79 KW	106.511/09/04/2000
CONDTANK	NATURAL GAS CONDENSATE STORAGE TANK	106.478/09/04/2000
CT-1	COOLING TOWER	41953, PSDTX951
CT-2	COOLING TOWER	41953, PSDTX951
DIES-TANK1	DIESEL STORAGE TANK	106.472/09/04/2000
DIES-TANK2	DIESEL STORAGE TANK	106.472/09/04/2000
DIES-TANK3	DIESEL STORAGE TANK	106.472/09/04/2000
DIES-TANK4	DIESEL STORAGE TANK	106.472/09/04/2000
EMGEN2	CUMMINS 900DQFAC CI ICE - 900 KW	106.511/09/04/2000
LUBE1	LUBE OIL DEMISTERS	41953, PSDTX951
TK-11A BFPO	11A BOILER FEED PUMP OIL	106.472/09/04/2000
TK-11B BFPO	11B BOILER FEED PUMP OIL	106.472/09/04/2000
TK-12A BFPO	12A BOILER FEED PUMP OIL	106.472/09/04/2000
TK-12B BFPO	12B BOILER FEED PUMP OIL	106.472/09/04/2000
TK-13A BFPO	13A BOILER FEED PUMP OIL	106.472/09/04/2000
TK-13B BFPO	13B BOILER FEED PUMP OIL	106.472/09/04/2000
TK-21A BFPO	21A BOILER FEED PUMP OIL	106.472/09/04/2000
TK-21B BFPO	21B BOILER FEED PUMP OIL	106.472/09/04/2000
TK-22A BFPO	22A BOILER FEED PUMP OIL	106.472/09/04/2000
TK-22B BFPO	22B BOILER FEED PUMP OIL	106.472/09/04/2000
TK-23A BFPO	23A BOILER FEED PUMP OIL	106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK-23B BFPO	23B BOILER FEED PUMP OIL	106.472/09/04/2000
TK-CTH ₂ SO ₄	COOLING TOWER SULFURIC ACID	106.472/09/04/2000
TK-CTNAHSO ₄	COOLING TOWER SODIUM BISULFITE	106.472/09/04/2000
TK-CTNAOCL	COOLING TOWER NAOCL	106.472/09/04/2000
TK-CTSI	COOLING TOWER SCALE INHIBITOR	106.472/09/04/2000
TK-GT11LO	GT11 LUBE OIL	41953, PSDTX951
TK-GT12LO	GT12 LUBE OIL	41953, PSDTX951
TK-GT13LO	GT13 LUBE OIL	41953, PSDTX951
TK-GT21LO	GT21 LUBE OIL	41953, PSDTX951
TK-GT22LO	GT22 LUBE OIL	41953, PSDTX951
TK-GT23LO	GT23 LUBE OIL	41953, PSDTX951
TK-RWH ₂ SO ₄	RAW WATER POND SULFURIC ACID	106.472/09/04/2000
TK-RWNAOCL	RAW WATER POND NAOCL	106.472/09/04/2000
TK-ST10HO	ST10 HYDRAULIC OIL	106.472/09/04/2000
TK-ST10LO	ST10 LUBE OIL	41953, PSDTX951
TK-ST20HO	ST20 HYDRAULIC OIL	106.472/09/04/2000
TK-ST20LO	ST20 LUBE OIL	41953, PSDTX951
TK-USED OIL	USED OIL TANK	106.472/09/04/2000
U1	GENERAL ELECTRIC 7241FA TURBINE - 170 MW	41953, PSDTX951
U1	HEAT RECOVERY STEAM GENERATOR	41953, PSDTX951
U1	TURBINE & HRSG STACK	41953, PSDTX951

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
U2	GENERAL ELECTRIC 7241FA TURBINE - 170 MW	41953, PSDTX951
U2	HEAT RECOVERY STEAM GENERATOR	41953, PSDTX951
U2	TURBINE & HRSG STACK	41953, PSDTX951
U3	GENERAL ELECTRIC 7241FA TURBINE - 170 MW	41953, PSDTX951
U3	HEAT RECOVERY STEAM GENERATOR	41953, PSDTX951
U3	TURBINE & HRSG STACK	41953, PSDTX951
U4	GENERAL ELECTRIC 7241FA TURBINE - 170 MW	41953, PSDTX951
U4	HEAT RECOVERY STEAM GENERATOR	41953, PSDTX951
U4	TURBINE & HRSG STACK	41953, PSDTX951
U5	GENERAL ELECTRIC 7241FA TURBINE - 170 MW	41953, PSDTX951
U5	HEAT RECOVERY STEAM GENERATOR	41953, PSDTX951
U5	TURBINE & HRSG STACK	41953, PSDTX951
U6	GENERAL ELECTRIC 7241FA TURBINE - 170 MW	41953, PSDTX951
U6	HEAT RECOVERY STEAM GENERATOR	41953, PSDTX951
U6	TURBINE & HRSG STACK	41953, PSDTX951
WTRPMP	JOHN DEERE JW6HUF40 CI ICE - 221 KW	41953, PSDTX951

Appendix A

Acronym List 42

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
SIP	state implementation plan
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table 44

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
Turbine Only - Hourly Emission Rates							
U1	Turbine No. 1 (5) GE 7FA	NO _x	62.2	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	31.7	-			
		CO (MSS)	2209.90	-			
		VOC	3.1	-			
		VOC (MSS)	183.49	-			
		PM	14.2	-			
		PM (MSS)	22.06	-			
		PM ₁₀	14.2	-			
		PM ₁₀ (MSS)	22.06	-			
		PM _{2.5}	14.2	-			
		PM _{2.5} (MSS)	22.06	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		SO ₂	28.4	-			
		SO ₂ (MSS)	36.17	-			
		H ₂ SO ₄	2.2	-			
		H ₂ SO ₄ (MSS)	4.56	-			
U2	Turbine No. 2 (5) GE 7FA	NO _x	62.2	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	31.7	-			
		CO (MSS)	2209.90	-			
		VOC	3.1	-			
		VOC (MSS)	183.49	-			
		PM	14.2	-			
		PM (MSS)	22.06	-			
		PM ₁₀	14.2	-			
		PM ₁₀ (MSS)	22.06	-			
		PM _{2.5}	14.2	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5} (MSS)	22.06	-			
		SO ₂	28.4	-			
		SO ₂ (MSS)	36.17	-			
		H ₂ SO ₄	2.2	-			
		H ₂ SO ₄ (MSS)	4.56	-			
U3	Turbine No. 3 (5) GE 7FA	NO _x	62.2	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	31.7	-			
		CO (MSS)	2209.90	-			
		VOC	3.1	-			
		VOC (MSS)	183.49	-			
		PM	14.2	-			
		PM (MSS)	22.06	-			
		PM ₁₀	14.2	-			
		PM ₁₀ (MSS)	22.06	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	14.2	-			
		PM _{2.5} (MSS)	22.06	-			
		SO ₂	28.4	-			
		SO ₂ (MSS)	36.17	-			
		H ₂ SO ₄	2.2	-			
		H ₂ SO ₄ (MSS)	4.56	-			
U4	Turbine No. 4 (5) GE 7FA	NO _x	62.2	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	31.7	-			
		CO (MSS)	2209.90	-			
		VOC	3.1	-			
		VOC (MSS)	183.49	-			
		PM	14.2	-			
		PM (MSS)	22.06	-			
		PM ₁₀	14.2	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM ₁₀ (MSS)	22.06	-			
		PM _{2.5}	14.2	-			
		PM _{2.5} (MSS)	22.06	-			
		SO ₂	28.4	-			
		SO ₂ (MSS)	36.17	-			
		H ₂ SO ₄	2.2	-			
		H ₂ SO ₄ (MSS)	4.56	-			
U5	Turbine No. 5 (5) GE 7FA	NO _x	62.2	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	31.7	-			
		CO (MSS)	2209.90	-			
		VOC	3.1	-			
		VOC (MSS)	183.49	-			
		PM	14.2	-			
		PM (MSS)	22.06	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM ₁₀	14.2	-			
		PM ₁₀ (MSS)	22.06	-			
		PM _{2.5}	14.2	-			
		PM _{2.5} (MSS)	22.06	-			
		SO ₂	28.4	-			
		SO ₂ (MSS)	36.17	-			
		H ₂ SO ₄	2.2	-			
		H ₂ SO ₄ (MSS)	4.56	-			
U6	Turbine No. 6 (5) GE 7FA	NO _x	62.2	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	31.7	-			
		CO (MSS)	2209.90	-			
		VOC	3.1	-			
		VOC (MSS)	183.49	-			
		PM	14.2	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM (MSS)	22.06	-			
		PM ₁₀	14.2	-			
		PM ₁₀ (MSS)	22.06	-			
		PM _{2.5}	14.2	-			
		PM _{2.5} (MSS)	22.06	-			
		SO ₂	28.4	-			
		SO ₂ (MSS)	36.17	-			
		H ₂ SO ₄	2.2	-			
		H ₂ SO ₄ (MSS)	4.56	-			
Turbine + Duct Burner (DB) - Hourly Emission Rates							
U1	Turbine No. 1 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	75.75	-			
		CO (MSS)	2209.90	-			
		VOC	11.85	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		VOC (MSS)	183.49	-			
		PM	22.06	-			
		PM ₁₀	22.06	-			
		PM _{2.5}	22.06	-			
		SO ₂	36.17	-			
		H ₂ SO ₄	4.56	-			
U2	Turbine No. 2 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	75.75	-			
		CO (MSS)	2209.90	-			
		VOC	11.85	-			
		VOC (MSS)	183.49	-			
		PM	22.06	-			
		PM ₁₀	22.06	-			
		PM _{2.5}	22.06	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		SO ₂	36.17	-			
		H ₂ SO ₄	4.56	-			
U3	Turbine No. 3 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	75.75	-			
		CO (MSS)	2209.90	-			
		VOC	11.85	-			
		VOC (MSS)	183.49	-			
		PM	22.06	-			
		PM ₁₀	22.06	-			
		PM _{2.5}	22.06	-			
		SO ₂	36.17	-			
		H ₂ SO ₄	4.56	-			
U4	Turbine No. 4 + 500 MMBtu DB (5,6)	NO _x	106.25	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	GE 7FA	CO	75.75	-			
		CO (MSS)	2209.90	-			
		VOC	11.85	-			
		VOC (MSS)	183.49	-			
		PM	22.06	-			
		PM ₁₀	22.06	-			
		PM _{2.5}	22.06	-			
		SO ₂	36.17	-			
		H ₂ SO ₄	4.56	-			
U5	Turbine No. 5 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	75.75	-			
		CO (MSS)	2209.90	-			
		VOC	11.85	-			
		VOC (MSS)	183.49	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM	22.06	-			
		PM ₁₀	22.06	-			
		PM _{2.5}	22.06	-			
		SO ₂	36.17	-			
		H ₂ SO ₄	4.56	-			
U6	Turbine No. 6 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		NO _x (MSS)	188.54	-			
		CO	75.75	-			
		CO (MSS)	2209.90	-			
		VOC	11.85	-			
		VOC (MSS)	183.49	-			
		PM	22.06	-			
		PM ₁₀	22.06	-			
		PM _{2.5}	22.06	-			
		SO ₂	36.17	-			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		H ₂ SO ₄	4.56	-			
U1, U2 U3, U4 U5, U6	Combined Annual Emission Rates Turbines Nos. 1- 6 + 500 MMBtu DBs	NO _x	-	1927.1	2, 8, 13, 15, 16, 17, 18, 19, 28, 29, 30	2, 15, 16, 18, 20, 21, 29	2, 15, 16, 22, 24
		CO	-	1152.1			
		VOC	-	152.7			
		PM	-	392.6			
		PM ₁₀	-	392.6			
		PM _{2.5}	-	392.6			
		SO ₂	-	285.5			
		H ₂ SO ₄	-	27.8			
EMGEN	Emergency Diesel Generator (7)	NO _x	30.49	1.83	2, 8	2, 20, 21	2
		CO	6.99	0.42			
		PM	0.89	0.05			
		PM ₁₀	0.89	0.05			
		PM _{2.5}	0.89	0.05			
		VOC	0.90	0.05			

Major NSR Summary Table

Permit Number: 41953 and PSDTX951					Issuance Date: July 24, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		SO ₂	5.14	0.31			
WTRPMP	Firewater Pump Engine (7)	NO _x	3.16	0.19	2, 8	2, 20, 21	2
		CO	0.17	0.02			
		PM	0.06	0.01			
		PM ₁₀	0.06	0.01			
		PM _{2.5}	0.06	0.01			
		VOC	0.10	0.01			
		SO ₂	0.36	0.03			
CT-1	Cooling Tower (8,9)	PM	27.54	18.93	25	20, 25	
		PM ₁₀	27.54	18.93			
		PM _{2.5}	27.54	18.93			
CT-2	Cooling Tower (8,9)	PM	27.54	18.93	25	20, 25	
		PM ₁₀	27.54	18.93			
		PM _{2.5}	27.54	18.93			
LUBE1	Lube Oil	PM	0.04	0.17	8	20	

Major NSR Summary Table

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			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Demisters (10)	PM ₁₀	0.04	0.17			
		PM _{2.5}	0.04	0.17			
		VOC	0.04	0.17			
FUG	Piping Fugitives (11)	VOC	1.25	5.49		20	
MSSFUG	Planned MSS Activities (11) ILE and non-ILE	NO _x	<0.01	<0.01		21, 29, 30	
		CO	<0.01	<0.01			
		VOC	18.39	0.13			

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

H₂SO₄ - sulfuric acid

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

MSS - maintenance, startup, and shutdown

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Planned MSS for all pollutants is authorized even if not specifically identified as MSS. During any clock hour that includes one or more minutes of planned MSS that pollutant's maximum hourly emission rate shall apply during that clock hour.

(6) The turbine and duct burner emission rates apply during any clock hour that includes one or more minutes of duct burner firing, and no MSS activities.

- (7) Emissions are based on normal operations of 100 operating hours per year.
- (8) Cooling tower PM₁₀ emission are an estimate only based on manufacturer's test data.
- (9) The maximum 24-hour average hourly PM₁₀ emission rate is 4.32 lb/hr for each cooling tower.
- (10) Turbine oil mist vent emissions are an estimate only based on estimates from the mist eliminator manufacturer data.
- (11) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Luminant Generation Company LLC
Authorizing the Continued Operation of
Forney Power Plant
Located at Forney, Kaufman County, Texas
Latitude 32° 45' 13" Longitude -96° 29' 27"

Permit: 41953 and PSDTX951

Issuance Date: July 24, 2020

Expiration Date: July 24, 2030



For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)]¹
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources-- Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]¹
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius	gpm = gallon per minute
°F = Temperature in degrees Fahrenheit	gr/1000scf = grain per 1000 standard cubic feet
°K = Temperature in degrees Kelvin	gr/dscf = grain per dry standard cubic feet
µg = microgram	H ₂ CO = formaldehyde
µg/m ³ = microgram per cubic meter	H ₂ S = hydrogen sulfide
acfm = actual cubic feet per minute	H ₂ SO ₄ = sulfuric acid
AMOC = alternate means of control	HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
AOS = alternative operating scenario	HC = hydrocarbons
AP-42 = Air Pollutant Emission Factors, 5th edition	HCl = hydrochloric acid, hydrogen chloride
APD = Air Permits Division	Hg = mercury
API = American Petroleum Institute	HGB = Houston/Galveston/Brazoria
APWL = air pollutant watch list	hp = horsepower
BPA = Beaumont/ Port Arthur	hr = hour
BACT = best available control technology	IFR = internal floating roof tank
BAE = baseline actual emissions	in H ₂ O = inches of water
bbl = barrel	in Hg = inches of mercury
bbl/day = barrel per day	IR = infrared
bhp = brake horsepower	ISC3 = Industrial Source Complex, a dispersion model
BMP = best management practices	ISCST3 = Industrial Source Complex Short-Term, a dispersion model
Btu = British thermal unit	K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
Btu/scf = British thermal unit per standard cubic foot or feet	LACT = lease automatic custody transfer
CAA = Clean Air Act	LAER = lowest achievable emission rate
CAM = compliance-assurance monitoring	lb = pound
CEMS = continuous emissions monitoring systems	hp = horsepower
cfm = cubic feet (per) minute	hr = hour lb/day = pound per day
CFR = Code of Federal Regulations	lb/hr = pound per hour
CN = customer ID number	lb/MMBtu = pound per million British thermal units
CNG = compressed natural gas	LDAR = Leak Detection and Repair (Requirements)
CO = carbon monoxide	LNG = liquefied natural gas
COMS = continuous opacity monitoring system	LPG = liquefied petroleum gas
CPMS = continuous parametric monitoring system	LT/D = long ton per day
DFW = Dallas/ Fort Worth (Metroplex)	m = meter
DE = destruction efficiency	m ³ = cubic meter
DRE = destruction and removal efficiency	m/sec = meters per second
dscf = dry standard cubic foot or feet	MACT = maximum achievable control technology
dscfm = dry standard cubic foot or feet per minute	MAERT = Maximum Allowable Emission Rate Table
ED = (TCEQ) Executive Director	MERA = Modeling and Effects Review Applicability
EF = emissions factor	mg = milligram
EFR = external floating roof tank	mg/g = milligram per gram
EGU = electric generating unit	mL = milliliter
EI = Emissions Inventory	MMBtu = million British thermal units
ELP = El Paso	MMBtu/hr = million British thermal units per hour
EPA = (United States) Environmental Protection Agency	MSDS = material safety data sheet
EPN = emission point number	MSS = maintenance, startup, and shutdown
ESL = effects screening level	MW = megawatt
ESP = electrostatic precipitator	NAAQS = National Ambient Air Quality Standards
FCAA = Federal Clean Air Act	NESHAP = National Emission Standards for Hazardous Air Pollutants
FCCU = fluid catalytic cracking unit	NGL = natural gas liquids
FID = flame ionization detector	NNSR = nonattainment new source review
FIN = facility identification number	NO _x = total oxides of nitrogen
ft = foot or feet	NSPS = New Source Performance Standards
ft/sec = foot or feet per second	PAL = plant-wide applicability limit
g = gram	PBR = Permit(s) by Rule
gal/wk = gallon per week	
gal/yr = gallon per year	
GLC = ground level concentration	
GLC _{max} = maximum (predicted) ground-level concentration	

PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter
PM₁₀ = total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO₂ = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 41953 and PSDTX951

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits shall be based on a rolling 12-month year rather than the calendar year.

Federal Applicability

2. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources, Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

A. Subpart A: General Provisions.

B. Subpart Da, Electric Utility Steam Generating Units.

C. Subpart GG, Stationary Gas Turbines.

These facilities shall comply with applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR Part 63:

D. Subpart A: General Provisions.

E. Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

Emission Standards and Operating Specifications

3. The six General Electric Frame 7FA (PG7241 [FA]) combustion turbine generator (CTG) units authorized by this permit are each rated for a nominal maximum power output of 172 megawatts (MW) at base load, 59°F ambient air, with inlet conditioning (evaporative coolers/foggers). The two steam turbines will produce a nominal 828 MW gross for a combined plant maximum power output of approximately 1,860 MW gross in combined cycle operation, 59°F ambient air.

These are nominal ratings and are not limitations. Higher than nominal output is allowed but the permit holder must still maintain compliance with all other permit conditions.

4. Each heat recovery steam generating (HRSG) unit duct burner is limited to a maximum heat input capacity of 550 million British thermal units per hour (MMBtu/hr) based on the higher heating value (HHV) of natural gas.
5. Each CTG shall normally operate at 100 percent base load except for periods of startup or shutdown as defined in Special Condition No. 28(A) and 28(B). Reduced load operation (operating below Mode 6Q) is authorized provided the maximum non-MSS lbs/hr emission rates specified in the attached table entitled Emission Sources – "Maximum Allowable Emissions Rates" for Emission Point Nos. (EPNs) U1, U2, U3, U4, U5, and U6 are not exceeded.

6. Fuel for CTGs and HRSG duct burners shall be limited to pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic foot (dscf) on a short-term basis and 0.25 grains total sulfur per 100 dscf on a rolling 12-month average basis. Use of any other fuel requires authorization from the TCEQ.
7. The firewater pump diesel engine and emergency generator diesel engine are authorized to fire distillate fuel oil containing not more than 0.05 weight percent sulfur and each is limited to a maximum of 100 non-emergency hours of operation annually.
8. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuels fired in the gas turbines, duct burners, emergency generator diesel engine, and firewater pump diesel engine or shall allow air pollution control agency representatives to obtain a sample for analysis.
9. The two Cooling Towers (EPNs CT-1 and CT-2) may have a maximum total dissolved solids (TDS) concentration of 49,550 parts per million (ppm) but shall not exceed an average TDS concentration of 7,770 ppm during any 24-hour period.
10. **CTG Emission Limits** - Compliance with this condition shall be demonstrated by completion of the initial stack sampling as described in Special Condition No. 15. The emissions specified below are not subject to the continuous compliance requirements of Special Condition No. 16.
 - A. Emissions of nitrogen oxides (NO_x) shall not exceed 9 parts per million, dry basis (ppmvd) (one-hour average) when corrected to 15 percent oxygen (O₂), without correction to International Standards Organization (ISO) conditions while operating in Mode 6Q.
 - B. Emissions of carbon monoxide (CO) shall not exceed 9 ppmvd (one-hour average) when corrected to 15 percent O₂ while operating in Mode 6Q.
 - C. Emissions of volatile organic compounds (VOC) measured as methane, shall not exceed 1.4 parts per million by volume wet (ppmvw) (one-hour average) when corrected to 15 percent O₂ while operating in Mode 6Q.
11. **HRSG Duct Burner Emission Limits** - Compliance with this condition shall be demonstrated by completion of the initial stack sampling as described in Special Condition No. 15. The emissions specified below are not subject to the continuous compliance requirements of Special Condition No. 16.

Emissions from each HRSG duct burner shall not exceed the following limits in lb/MMBtu (one-hour average), based on the HHV of natural gas.

<u>Pollutant</u>	<u>Emission Limit (lb/MMBtu)</u>
NO _x	0.08
CO	0.08
VOC	0.016

12. **Combined CTG and HRSG Duct Burner Stack Emission Limits** - Compliance with this condition shall be demonstrated by completion of the initial stack sampling as described in Special Condition No. 15. The emissions specified below are not subject to the continuous compliance requirements of Special Condition No. 16.

- A. Emissions of NO_x shall not exceed 13.4 ppmvd (one-hour average) when corrected to 15 percent O₂, without correction to ISO conditions, at full load.
 - B. Emissions of CO shall not exceed 15.0 ppmvd (one-hour average) when corrected to 15 percent O₂, at full load.
 - C. Emissions of VOC measured as methane shall not exceed 7.0 ppmvd (one-hour average) when corrected to 15 percent O₂, at full load.
13. Opacity of emissions from EPNs U1, U2, U3, U4, U5 and U6 shall not exceed five percent averaged over a six-minute time period, except during periods of maintenance, startup, or shutdown as defined in Special Condition No. 28(A) and 28(B). This determination shall be made by first observing for visible emissions while the facility is operating. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point(s). If visible emissions are observed from the stack(s), then opacity shall be determined by 40 CFR Part 60, Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition. Observations shall be performed and recorded quarterly. If opacity exceeds five percent, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation.

Initial Determination of Compliance

14. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
15. Upon the request of the TCEQ Dallas/Ft. Worth Regional Office, the holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs U1, U2, U3, U4, U5, and U6. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Test Methods.

Fuel sampling using the methods and procedures of 40 CFR § 60.335(b)(10) may be conducted in lieu of stack sampling for SO₂. If fuel sampling is used, compliance with New Source Performance Standards (NSPS), Subpart GG, SO₂ limits shall be based on 100 percent conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or their designated representative shall be afforded the opportunity to observe all such sampling. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ Dallas/Ft. Worth Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, the TCEQ, or the EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Air Permits Division in Austin.

- B. Air emissions from each CTG (duct burners off) shall be tested while firing at the minimum point in the normal operating range (approximately 50 to 65 percent of the firing range) and at full load. The normal operating range consistent with emissions limits is to be determined during stack testing. Each tested load shall be identified in the sampling report. Air emissions to be sampled and analyzed while at full load include (but are not limited to) NO_x, O₂, CO, VOC, SO₂, and opacity. Fuel sampling using the methods and procedures of 40 CFR § 60.335(b)(10) may be conducted in lieu of stack sampling for SO₂. Air emissions to be sampled and analyzed while at the minimum point in the range include (but are not limited to) VOC.
- C. Air emissions from the HRSG duct burners shall be tested while firing at maximum rated heat capacity with natural gas considering the ambient conditions at the time of testing. Air emissions to be sampled and analyzed include (but are not limited to) NO_x, O₂, CO, VOC, SO₂, PM₁₀, and opacity. Fuel sampling using the methods and procedures of 40 CFR § 60.335(b)(10) may be conducted in lieu of stack sampling for SO₂.

The HRSG duct burner emissions shall be calculated as the remainder of emissions when subtracting the CTG stack emissions with the duct burners out of service from the CTG stack emissions with the duct burners in service. The CTG must be operating at a maximum rate for the ambient conditions and shall be fired with natural gas. For the purposes of demonstrating initial compliance, emissions from the HRSG duct burners shall not exceed the limits in Special Condition No. 11.

- D. Additional sampling shall occur as may be required by the TCEQ or the EPA.
- E. Within 60 days after the completion of the testing and sampling required herein, copies of the sampling reports shall be distributed as follows:

One copy to the TCEQ Dallas/Ft. Worth Regional Office.
One copy to the TCEQ Central Records in Austin.
One copy to the EPA Region 6 Office, Dallas.

- F. Initial sampling was completed on May 23, 2003.

Continuous Determination of Compliance for NO_x and CO

- 16. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to measure and record the concentrations of NO_x, CO, and O₂ from each Unit Stack (EPNs U1, U2, U3, U4, U5, and U6). The initial certification and relative accuracy test audit (RATA) shall be conducted prior to or during the sampling required by Special Condition No. 15.

- A. Monitored NO_x and CO concentrations shall be corrected and reported in dimensional units corresponding to the emission rate and concentration limits established for the gas turbines and duct burners in this permit.
- B. The CEMS will be required to meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendix A. Any CEMS downtime in excess of 5% during a calendar year shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director. CEMS downtime shall be calculated as:

$$A^* = \frac{\sum H_c}{\sum H_o} \times 100$$

Where:

A* is the percent of time that the CEMS was unavailable

H_c is the number of annual hours the CEMS was not collecting data

H_o is the number of annual hours that the combined cycle combustion turbine operated

- If the owner or operator has installed a NO_x emission rate CEMS to meet the requirements of 40 CFR Part 75 and is continuing to meet the ongoing requirements of 40 CFR Part 75, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of § 60.51Da. Data reported to meet the requirements of § 60.51Da shall not include data substituted using the missing data procedures in subpart D of 40 CFR Part 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR Part 75.
- C. The monitoring data shall be reduced to hourly average values at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. Two valid data points shall be generated during the hourly period in which zero and span is performed.
 - D. All monitoring data and quality-assurance data shall be maintained by the source for a period of five years and shall be made available to the TCEQ Executive Director or her designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. Hourly average concentrations from EPNs U1, U2, U3, U4, U5, and U6 shall be summed to tons per year and used to determine compliance with the annual emission limits of this permit.
 - E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- 17. If any emission monitor fails to meet specified performance, it shall be repaired or replaced immediately, but no later than seven days after it was first detected by any employee at the facility, unless written permission is obtained from the TCEQ which allows for a longer repair/replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
 - 18. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the gas

turbines and the duct burners. The systems shall be accurate to ± 5.0 percent of the unit's maximum flow.

19. The holder of this permit shall monitor the fuel fired in the gas turbines and duct burners for fuel-bound sulfur as specified in 40 CFR § 60.334(h).

Recordkeeping Requirements

20. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, the EPA, or any air pollution control agency with jurisdiction.
 - A. A copy of this permit.
 - B. Permit application submitted July 29, 1999 and subsequent representations submitted to the TCEQ.
 - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 15 to demonstrate initial compliance.
 - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
 - E. Completed test reports from TCEQ-required compliance testing. These test reports shall be retained on-site for the life of the equipment.
21. The following information shall be maintained at the plant by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, the EPA, or any local air pollution control program having jurisdiction.
 - A. The CEMS data of NO_x, CO, and O₂ emissions from EPNs U1, U2, U3, U4, U5, and U6 to demonstrate compliance with the emission rates listed in the MAERT.
 - B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems in a permanent form suitable for inspection.
 - C. Records of the hours of operation and average daily quantity of natural gas fired in the CTGs and HRSG duct burners.
 - D. Records of the hours of operation of the firewater pump diesel engine (EPN WTRPMP) and emergency diesel generator (EPN EMGEN).
 - E. Records of visible emissions and opacity checks pursuant to Special Condition No. 13.
 - F. Records of natural gas and the sulfur content according to the fuel suppliers for the turbines to show compliance with Special Condition No. 6.
 - G. Records of fuel sampling conducted pursuant to Special Condition No. 19.
 - H. For startup, shutdown, non-ILE maintenance, and maintenance as described in Special Condition 28(C), records of the date, time, and duration of the activity or facility operation; and emissions from those maintenance activities not measured by a CEMS.

Reporting

22. The holder of this permit shall submit to the TCEQ Dallas/Ft. Worth Regional Office quarterly reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain the hours of operation of the equipment authorized by this permit and a report summary of the periods of non-complying emissions and CEMS downtimes by cause.
23. For the purposes of reporting pursuant to Special Condition No. 22, non-complying emissions from equipment authorized by this permit shall be defined as follows:
 - A. Non-complying emissions of NO_x or CO shall be defined as each one-hour period of operation during which the average emissions as measured and recorded by the CEMS exceed any pound-per-hour emission limitation specified in the MAERT. Emissions from startup or shutdown activities are subject to separate limits specified in the MAERT of this permit.
 - B. Non-complying annual emissions of NO_x or CO shall be defined as any rolling 12-month period of operation during which the 12-month cumulative emissions exceeds the annual limits specified in the MAERT of this permit.
 - C. Noncomplying emissions of SO₂ shall be defined as emissions resulting from firing fuel which is found to contain sulfur in excess of the limits of Special Condition No. 6 or which indicates exceedance of the SO₂ limitation specified in the MAERT based on 100 percent conversion of the sulfur in the fuel to SO₂.
24. If the average NO_x or CO stack outlet emission rate exceeds the maximum allowable emissions rate for more than one hour, the holder of this permit shall investigate and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible. If the NO_x or CO emission rate exceeds the emission rate in the MAERT for more than 24 hours, the permit holder shall notify the TCEQ Regional Office either verbally or with a written report detailing the cause of the increase in emissions and all efforts being made to correct the problem.

Cooling Towers

25. The Cooling Tower(s) (EPNs CT-1 and CT-2) shall be monitored in the following manner to show compliance with Special Condition No. 9:
 - A. The site specific demonstrated value will be based off the following calculation:
$$\text{TDS} = -11 + 0.737 * \text{conductivity}$$

This calculation is based off correspondence from FPLE Forney, LLC on November 11, 2010 to the Region 4 office of the TCEQ establishing a site specific value.
 - B. Continuous compliance with the hourly and annual particulate matter emission rates for the Cooling Towers in the MAERT shall be demonstrated by the holder of this permit by monitoring the conductivity of the cooling water at a monitoring point in the recirculating water of each cooling tower, and recording these conductivity readings on a no less than weekly basis. Continuous monitoring data may be reduced to average 24-hour periods for demonstration of compliance with Special Condition No. 9. Each conductivity measurement shall be converted to TDS concentration in ppm using the conductivity to TDS conversion factor established in accordance with Special Condition No. 9.

The monitoring data required by this special condition shall be kept for at least five years from the date monitoring is done, and the data shall be made available immediately upon request to the U.S. Environmental Protection Agency (EPA) or TCEQ personnel. These records shall include:

- (1) Location of the monitoring point for the cooling tower recirculating water and date and time of monitoring.
- (2) Weekly measured conductivity in μS (microsiemens) and the equivalent TDS in parts per million in the recirculating water of the cooling tower.

Maintenance, Startup, and Shutdown (MSS)

26. This permit authorizes the emissions from the planned MSS activities listed in Attachment A, Attachment B, and the table entitled "Emission Sources - Maximum Allowable Emission Rates" attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the non-ILE planned maintenance activities that this permit authorizes to be performed.
27. The holder of this permit shall minimize emissions during planned MSS activities by operating the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility.
28. Emissions during planned MSS activities will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows:
 - A. A planned startup of the electric generating facilities (EGFs) with EPNs U1, U2, U3, U4, U5 and U6 is defined as the period when gas flow to the turbines begins and ends when the turbines have reached Mode 6Q. A planned cold startup is defined as a startup after a unit has received no fuel for a period of 24 hours or more. Cold startups are limited to 12 hours per event. An overhaul startup is defined as a startup after a significant equipment overhaul and is limited to less than 15 hours. A warm startup is defined as a startup that is not a cold startup or overhaul startup and is limited to less than 3 hours.
 - B. A planned shutdown of the EGFs with EPNs U1, U2, U3, U4, U5 and U6 is defined as the period that begins when the turbine drops below Mode 6Q. A planned shutdown for each EGF is limited to 4 hours per event.
 - C. Emissions from combustion turbine optimization activities such as combustion tuning for EPNs U1, U2, U3, U4, U5 and U6 shall be subject to the hourly emission limits for MSS activities from the gas turbines listed on the MAERT. The emissions from such activities shall not occur for more than 8 hours per calendar day.
29. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit shall be demonstrated as follows:
 - A. The permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (see Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.

- B. For each pollutant emitted during non-ILE planned maintenance activities (see Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 30(A), the permit holder shall compare the pollutant's short-term (hourly) emissions during planned maintenance activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT for each calendar month.
 - C. For each pollutant emitted during non-ILE planned maintenance activities (see Attachment B) whose emissions occur through a stack but are not measured using CEMS as per Special Condition No. 30(A), the permit holder shall determine the total emissions of the pollutant through the stack that result from such non-ILE planned maintenance activities in accordance with Special Condition No. 30(B) for each calendar month.
30. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 29 as follows:
- A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
 - B. For each pollutant not described in Special Condition No. 30(A), the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs 1 through 3 below, provided that the permit holder maintains appropriate records supporting such determination.
 - (1) Use of emission factor(s), facility specific parameter(s), and/or engineering knowledge of the facility's operations;
 - (2) Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content; or
 - (3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
31. The permit conditions and emission limits in the MAERT relating to planned MSS activities do not become effective until December 31, 2012.

General Requirements

32. The following facilities are authorized by permits by rule (PBR) under 30 TAC Chapter 106.

Facilities	Authorization
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Comfort Heating	§ 106.102
Bench Scale Laboratory Equipment	§ 106.122
Bulk Mineral Handling	§ 106.144
Routine Maintenance, Start-up and Shutdown of Facilities, and Temporary Maintenance Facilities	§ 106.263
Welding, Soldering, Brazing	§ 106.227
Handheld and Manually Operated Machines	§ 106.265
Vacuum Cleaning Systems	§ 106.266
Refrigeration Systems	§ 106.373
Dry Abrasive Cleaning	§ 106.452
Degreasing Unit	§ 106.454
Tank Storage and Organic and Inorganic Liquid Loading and Unloading	§ 106.472
Tank Storage and Organic Liquid Loading and Unloading	§ 106.473

Date: July 24, 2020 _

Attachment A

Permit Nos. 41953 and PSDTX951

Inherently Low Emitting (ILE) Planned Maintenance Activities

	Emissions					
Planned Maintenance Activity	NH ₃ / urea	VOC	NO _x	CO	PM	SO ₂
Instrumentation maintenance (EPN MSS FUG)			x	x		

Date: July 24, 2020 .

Attachment B

Permit Nos. 41953 and PSDTX951

Non-ILE Planned Maintenance Activities

	Emissions					
Planned Maintenance Activity	NH ₃ / urea	VOC	NO _x	CO	PM	SO ₂
Combustion turbine optimization (EPNs U1, U2, U3, U4, U5 and U6)		x	x	x	x	x
Turbine washing (EPN MSS FUG)		x				

Date: July 24, 2020

Emission Sources - Maximum Allowable Emission Rates

Permit Number 41953 and PSDTX951

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Turbine Only - Hourly Emission Rates				
U1	Turbine No. 1 (5) GE 7FA	NO _x	62.2	-
		NO _x (MSS)	188.54	-
		CO	31.7	-
		CO (MSS)	2209.90	-
		VOC	3.1	-
		VOC (MSS)	183.49	-
		PM	14.2	-
		PM (MSS)	22.06	-
		PM ₁₀	14.2	-
		PM ₁₀ (MSS)	22.06	-
		PM _{2.5}	14.2	-
		PM _{2.5} (MSS)	22.06	-
		SO ₂	28.4	-
		SO ₂ (MSS)	36.17	-
		H ₂ SO ₄	2.2	-
		H ₂ SO ₄ (MSS)	4.56	-
U2	Turbine No. 2 (5) GE 7FA	NO _x	62.2	-
		NO _x (MSS)	188.54	-
		CO	31.7	-
		CO (MSS)	2209.90	-
		VOC	3.1	-
		VOC (MSS)	183.49	-
		PM	14.2	-

Emission Sources - Maximum Allowable Emission Rates

		PM (MSS)	22.06	-
		PM ₁₀	14.2	-
		PM ₁₀ (MSS)	22.06	-
		PM _{2.5}	14.2	-
		PM _{2.5} (MSS)	22.06	-
		SO ₂	28.4	-
		SO ₂ (MSS)	36.17	-
		H ₂ SO ₄	2.2	-
		H ₂ SO ₄ (MSS)	4.56	-
U3	Turbine No. 3 (5) GE 7FA	NO _x	62.2	-
		NO _x (MSS)	188.54	-
		CO	31.7	-
		CO (MSS)	2209.90	-
		VOC	3.1	-
		VOC (MSS)	183.49	-
		PM	14.2	-
		PM (MSS)	22.06	-
		PM ₁₀	14.2	-
		PM ₁₀ (MSS)	22.06	-
		PM _{2.5}	14.2	-
		PM _{2.5} (MSS)	22.06	-
		SO ₂	28.4	-
		SO ₂ (MSS)	36.17	-
		H ₂ SO ₄	2.2	-
		H ₂ SO ₄ (MSS)	4.56	-
U4	Turbine No. 4 (5) GE 7FA	NO _x	62.2	-
		NO _x (MSS)	188.54	-
		CO	31.7	-
		CO (MSS)	2209.90	-

Emission Sources - Maximum Allowable Emission Rates

		VOC	3.1	-
		VOC (MSS)	183.49	-
		PM	14.2	-
		PM (MSS)	22.06	-
		PM ₁₀	14.2	-
		PM ₁₀ (MSS)	22.06	-
		PM _{2.5}	14.2	-
		PM _{2.5} (MSS)	22.06	-
		SO ₂	28.4	-
		SO ₂ (MSS)	36.17	-
		H ₂ SO ₄	2.2	-
		H ₂ SO ₄ (MSS)	4.56	-
U5	Turbine No. 5 (5) GE 7FA	NO _x	62.2	-
		NO _x (MSS)	188.54	-
		CO	31.7	-
		CO (MSS)	2209.90	-
		VOC	3.1	-
		VOC (MSS)	183.49	-
		PM	14.2	-
		PM (MSS)	22.06	-
		PM ₁₀	14.2	-
		PM ₁₀ (MSS)	22.06	-
		PM _{2.5}	14.2	-
		PM _{2.5} (MSS)	22.06	-
		SO ₂	28.4	-
		SO ₂ (MSS)	36.17	-
		H ₂ SO ₄	2.2	-
		H ₂ SO ₄ (MSS)	4.56	-
U6	Turbine No. 6 (5) GE 7FA	NO _x	62.2	-

Emission Sources - Maximum Allowable Emission Rates

		NO _x (MSS)	188.54	-
		CO	31.7	-
		CO (MSS)	2209.90	-
		VOC	3.1	-
		VOC (MSS)	183.49	-
		PM	14.2	-
		PM (MSS)	22.06	-
		PM ₁₀	14.2	-
		PM ₁₀ (MSS)	22.06	-
		PM _{2.5}	14.2	-
		PM _{2.5} (MSS)	22.06	-
		SO ₂	28.4	-
		SO ₂ (MSS)	36.17	-
		H ₂ SO ₄	2.2	-
		H ₂ SO ₄ (MSS)	4.56	-
Turbine + Duct Burner (DB) - Hourly Emission Rates				
U1	Turbine No. 1 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-
		NO _x (MSS)	188.54	-
		CO	75.75	-
		CO (MSS)	2209.90	-
		VOC	11.85	-
		VOC (MSS)	183.49	-
		PM	22.06	-
		PM ₁₀	22.06	-
		PM _{2.5}	22.06	-
		SO ₂	36.17	-
		H ₂ SO ₄	4.56	-
U2	Turbine No. 2 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-
		NO _x (MSS)	188.54	-

Emission Sources - Maximum Allowable Emission Rates

		CO	75.75	-
		CO (MSS)	2209.90	-
		VOC	11.85	-
		VOC (MSS)	183.49	-
		PM	22.06	-
		PM ₁₀	22.06	-
		PM _{2.5}	22.06	-
		SO ₂	36.17	-
		H ₂ SO ₄	4.56	-
U3	Turbine No. 3 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-
		NO _x (MSS)	188.54	-
		CO	75.75	-
		CO (MSS)	2209.90	-
		VOC	11.85	-
		VOC (MSS)	183.49	-
		PM	22.06	-
		PM ₁₀	22.06	-
		PM _{2.5}	22.06	-
		SO ₂	36.17	-
		H ₂ SO ₄	4.56	-
U4	Turbine No. 4 + 500 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-
		NO _x (MSS)	188.54	-
		CO	75.75	-
		CO (MSS)	2209.90	-
		VOC	11.85	-
		VOC (MSS)	183.49	-
		PM	22.06	-
		PM ₁₀	22.06	-
		PM _{2.5}	22.06	-

Emission Sources - Maximum Allowable Emission Rates

		SO ₂	36.17	-
		H ₂ SO ₄	4.56	-
U5	Turbine No. 5 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-
		NO _x (MSS)	188.54	-
		CO	75.75	-
		CO (MSS)	2209.90	-
		VOC	11.85	-
		VOC (MSS)	183.49	-
		PM	22.06	-
		PM ₁₀	22.06	-
		PM _{2.5}	22.06	-
		SO ₂	36.17	-
		H ₂ SO ₄	4.56	-
U6	Turbine No. 6 + 550 MMBtu DB (5,6) GE 7FA	NO _x	106.25	-
		NO _x (MSS)	188.54	-
		CO	75.75	-
		CO (MSS)	2209.90	-
		VOC	11.85	-
		VOC (MSS)	183.49	-
		PM	22.06	-
		PM ₁₀	22.06	-
		PM _{2.5}	22.06	-
		SO ₂	36.17	-
		H ₂ SO ₄	4.56	-
U1, U2 U3, U4 U5, U6	Combined Annual Emission Rates Turbines Nos. 1- 6 + 500 MMBtu DBs	NO _x	-	1927.1
		CO	-	1152.1
		VOC	-	152.7
		PM	-	392.6
		PM ₁₀	-	392.6

Emission Sources - Maximum Allowable Emission Rates

		PM _{2.5}	-	392.6
		SO ₂	-	285.5
		H ₂ SO ₄	-	27.8
EMGEN	Emergency Diesel Generator (7)	NO _x	30.49	1.83
		CO	6.99	0.42
		PM	0.89	0.05
		PM ₁₀	0.89	0.05
		PM _{2.5}	0.89	0.05
		VOC	0.90	0.05
		SO ₂	5.14	0.31
WTRPMP	Firewater Pump Engine (7)	NO _x	3.16	0.19
		CO	0.17	0.02
		PM	0.06	0.01
		PM ₁₀	0.06	0.01
		PM _{2.5}	0.06	0.01
		VOC	0.10	0.01
		SO ₂	0.36	0.03
CT-1	Cooling Tower (8,9)	PM	27.54	18.93
		PM ₁₀	27.54	18.93
		PM _{2.5}	27.54	18.93
CT-2	Cooling Tower (8,9)	PM	27.54	18.93
		PM ₁₀	27.54	18.93
		PM _{2.5}	27.54	18.93
LUBE1	Lube Oil Demisters (10)	PM	0.04	0.17
		PM ₁₀	0.04	0.17
		PM _{2.5}	0.04	0.17
		VOC	0.04	0.17
FUG	Piping Fugitives (11)	VOC	1.25	5.49
MSSFUG	Planned MSS Activities (11)	NO _x	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

		CO	<0.01	<0.01
		VOC	18.39	0.13

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- H₂SO₄ - sulfuric acid
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
- PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
- PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- MSS - maintenance, startup, and shutdown
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Planned MSS for all pollutants is authorized even if not specifically identified as MSS. During any clock hour that includes one or more minutes of planned MSS that pollutant's maximum hourly emission rate shall apply during that clock hour.
- (6) The turbine and duct burner emission rates apply during any clock hour that includes one or more minutes of duct burner firing, and no MSS activities.
- (7) Emissions are based on normal operations of 100 operating hours per year.
- (8) Cooling tower PM₁₀ emission are an estimate only based on manufacturer's test data.
- (9) The maximum 24-hour average hourly PM₁₀ emission rate is 4.32 lb/hr for each cooling tower.
- (10) Turbine oil mist vent emissions are an estimate only based on estimates from the mist eliminator manufacturer data.
- (11) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: July 24, 2020